

INFORMATION DISCLOSURE STATEMENT

LIST OF DISCLOSURE REFERENCES

Docket No.	Serial No.			
24,484	09/875,177			
File Date:	Group Art Unit:			
June 6, 2001	1623			
Applicants:				
Joseph Lincoln Komen et al.				

U.S. Patent Documents

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
GN	BU	6,379,494	4/2002	Jewell et al.	162	9	
A	BV	6,409,881	6/2002	Jaschinski	162	9	Nov. 7, 2000
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Foreign Patent Documents

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:		Document Number	Date	Country	Class	Subclass	Yes	No
AV	BW	WO 00/56978	9/2000	USA PCT	D21H	21/10		
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ther Disclosure References (Including author, title date pertinent pages, etc.)

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REMARKS

U.S. Patent 6,379,494 has recently issued to some of the present inventors and is directed to a stabilized carboxylated cellulose produced by oxidation with one of the nitroxide compositions disclosed in the present invention.

E White	1/28/2003	
Examiner	Date Considered	

*EXAMINER: Initial Reference if considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance *and* not considered. Include copy of this form with next communication to Applicant.

Respectfully submitted,

Joseph Lincoln Komen, Ananda Weerawarna, and Richard A. Jewell

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INFORMATION DISCLOSURE STATE- MENT	Docket No. 24,484 File Date: June 6, 2001	Serial No. Group Art Unit:	875177
LIST OF DISCLOSURE REFERENCES	Applicant: Joseph Linco	ln Komen et al.	JC92

U.S. Patent Documents

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
AV	AA	3,575,177	4/71	Briskin et al.	132	2	
A	AB	4,100,341	7/78	Brasey et al.	536	56	
SI	AC	4,505,775	3/85	Harding et al.	162	9	
All	AD	5,667,637	9/97	Jewell et al.	162	146	
A	AE	5,755,828	5/98	Westland	8	185	
Al	AF	6,031,101	2/00	Devine et al.	546	112	April 9, 1998
SW	AG	6,127,573	10/00	Li et al.	546	419	April 9, 1998

Foreign Patent Documents

		D .					Trans	lation
		Document Number	Date	Country	Class	Subclass	Yes	No
AV.	AH	0 574 666 A1	4/93	EPO	C07D	211/94	X	
	AI	1 077 221 A1	2/2001	EPO	C08B	31/18		
AV.	AJ	1 077 285 A 1	2/2001	EPO	D21H	11/20		
Al,	AK	1 077 286 A1	2/2001	EPO	D21H	11/20		
A	AL	2,674,528	10/92	France	C08G	65/32		
\mathcal{A}' .	AM	2001/49591	2/2001	Japan	D21H	11/20	X	
A	AN	WO 95/07303	3/95	PCT	C08B	37/00		
Al	AO	WO 96/36621	11/96	PCT	C07D	295/22		

Foreign Patent Documents Continued

							Trans	lation
		Document Number	Date	Country	Class	Subclass	Yes	No
EW	AP	WO 96/38484	12/96	PCT	C08B	31/18		·
A	AQ	WO 99/23117	5/99	PCT	C08B	15/04		
a	AR	WO 99/57158	11/99	PCT	C08B	31/18		
W	AS	WO 00/50388	8/00	PCT	C07C	239/08		
	AT	WO 00/50462	8/00	PCT	C08B	15/02		
Al.	AU	WO 00/50463	8/00	PCT	C08B	15/02		
	AV	WO 00/50621	8/00	PCT	C12P	12/00		
A	AW	WO 01/29309	4/01	PCT				

Other Disclosure References (Including author, title date pertinent pages, etc.)

a/	AX	Andersson, R., J. Hoffman, N. Nahar, and E. Scholander. An n.m.r. study of the products of oxidation of cellulose and $(1\rightarrow 4)-\beta$ -p-xylan with sodium nitrite in or-
CAT		thophosphoric acid. Carbohydrate Research 206: 340-346 (1990).
AL		Anelli, P.L., S. Banfi, F. Montanari, and S. Quichi. Oxidation of diols with alkali
<i>M</i> /	AY	hypochlorites catalyzed by oxammonium salts under two-phase conditions. <i>Jour-</i>
		nal of Organic Chemistry 54 : 2970-2972 (1989).
4 /	AZ	Barzyk, D., D. H. Page, and A. Ragauskas. Acidic group topochemistry and fibre-
Art		to-fibre bond strength. <i>Journal of Pulp and Paper Science</i> 23 (2): J59-J61 (1997).
AL C		Barzyk, D., D. H. Page, and A. Ragauskas. Carboxylic acid groups and fibre
<i>911/</i>	BA	bonding. In The Fundamentals of Papermaking Materials: Transactions of 11th
CAN		Fundamental Research Symposium, Cambridge, 2: 893-907 (Sept. 1997).
		Besemer, A. C., A. E. J. de Nooy. and H. van Bekkum. Methods for selective oxi-
1 /1/	ВВ	dation of cellulose: Preparation of 2,3-dicarboxycellulose and 6-carboxy- cellu-
/	ļ	lose. In Cellulose Derivatives, T. J. Heinze and W. G. Glasser eds., Ch. 5, pp 73-
'		82 (1996).
1	BC	Chang, P. S. and J. F. Robyt. Oxidation of primary alcohol groups of naturally
<i>a</i>		occurring polysaccharides with 2,2,6,6-tetramethylpiperidine oxoammonium ion.
Zu		Journal of Carbohydrate Chemistry 15(7): 819-830 (1996).
1/	†	Datye, K. V. and G. M. Nabar. Studies in the reaction of formaldehyde with un-
<i>9</i> /	BD	modified, modified, and dyed celluloses. Part III: The reaction of formaldehyde
<i> [VV</i>		and oxycelluloses. Textile Research Journal 33(7): 500-510 (1963).
	BE	Davis, N. J. and S. L. Flitsch. Selective oxidation of monosaccharide derivatives
<i>III</i>	DE	'
L CV	L	to uronic acids. Tetrahedron Letters 34 (7): 1181-1184 (1993).

AV	BF	Einhorn, J., C. Einhorn, F. Ratajczak, and J-L. Pierre. Efficient and highly selective oxidation of primary alcohols to aldehydes by N-chlorosuccinimide mediated by oxammonium salts. <i>Journal of Organic Chemistry</i> 61: 7452-7454 (1996).
A	ВG	Ganiev, I. M., Q. K. Timerghazin, A. F. Khalizov, V. V. Shereshovets, I. M. Grigor'ev, and G. A. Tolskitov. Complex of Chlorine dioxide with TEMPO and its conversion into oxoammonium salt. <i>Journal of Physical Organic Chemistry</i> 14: 38-42 (2001).
A	ВН	Isogai, A. Application of stable nitroxyl radical reagents to cellulose modification. <i>Cellulose Communications</i> 5 (3): 153-164 (1998).
A	BI	Isogai, A. and Y. Kato. Preparation of polyuronic acid from cellulose by TEMPO-mediated oxidation. <i>Cellulose</i> 5:153-164 (1998).
W	BJ	Kitaoka, T., A. Isogai, and F Onabe. Surface modification of pulp fibers by TEMPO-mediated oxidation. Sen'i Gakukai Preprint 1998.
A	BK	Kitaoka, T., A Isogai, and F. Onabe. Chemical modification of pulp fibers by TEMPO-mediated oxidation. <i>Nordic Pulp and Paper Research Journal</i> 14 (4): 279-284 (1999).
EN	BL	Luner, P., K. P. Vemuri, and B. Leopold. The effect of chemical modification on the mechanical properties of paper. II. Wet strength of oxidized springwood and summerwood southern pine kraft fibers. <i>Tappi</i> 50 (3): 1127-120 (1967).
al	ВМ	Luner, P., K. P. Vemuri, and F. Womeldorff. The effect of chemical modification on the mechanical properties of paper. III. Dry strength of oxidized springwood and summerwood southern pine kraft fibers. <i>Tappi</i> 50 (5): 227-230 (1967).
- AV	BŅ	de Nooy, A. E. J., A. C. Besemer, and H. van Bekkum. Highly selective TEMPO mediated oxidation of primary alcohol groups in polysaccharides. <i>Receuil des Traveau Chimiques des Pays-Bas</i> 113(3): 165-166 (1994).
AV	BO	de Nooy, A. E. J., A. C. Besemer, and H. van Bekkum. Highly selective nitroxyl radical-mediated oxidation of primary alcohol groups in water soluble glucans. <i>Carbohydrate Research</i> 269 :89-98 (1995).
A	BP	de Nooy, A. E. J., A. C. Besemer, and H. van Beckum. On the use of stable organic nitroxyl radicals for the oxidation of primary and secondary alcohols. <i>Synthesis: Journal of Synthetic Organic Chemistry</i> October 1996 pp 1153-1174.
Al	BQ	Shenai, V. A. and A. S. Narkhede. Hypochlorite oxidation of cellulose in the presence of cobalt sulfide. <i>Textile Dyer and Printer</i> 20 : 17-22 (1987).
A	BR	Shet, R. T. and A. M. Yabani. Crease-recovery and tensile-strength properties of unmodified and modified cotton cellulose treated with crosslinking agents. <i>Textile Research Journal</i> 51 (11): 740-744 (1981).
al	BS	Young, R. A. Bonding of oxidized cellulose fibers and interaction with wet strength resins. <i>Wood and Fiber</i> 10(2): 112-119 (1978).
AV	вт	Zhao, M., J. Li, E. Mano, Z. Song, D. M. Tschaen, E. J. J. Grabowski, and P. J. Reider. Oxidation of primary alcohols to carboxylic acids with sodium chlorite catalyzed by TEMPO and bleach. <i>Journal of Organic Chemistry</i> 64 : 2564-2566 (1999).

REMARKS

All of the references cited above are noted and briefly discussed in the body of the specification. None are believed to be anticipatory of the present claims either singly or in any combination.

Examiner 1/28/1003

Date Considered

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